

RAW SEQUENCE LISTING

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Application Serial Number: 10/500,307
Source: PGT/10
Date Processed by STIC: 5/19/05

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DATE: 05/19/2005

PATENT APPLICATION: US/10/500,307

TIME: 10:42:27

Input Set : A:\10500307.txt

Output Set: N:\CRF4\05182005\J500307.raw

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3 <110> APPLICANT: NEDERLANDSE ORGANISATIE VOOR TOEGEPAST
4     Pieter Hendrik POWELS
5     Egbert SMIT
6     Frans TIELEN
8 <120> TITLE OF INVENTION: MODIFIED BACTERIAL SURFACE LAYER PROTEINS
10 <130> FILE REFERENCE: 117-509 / N83122 SMW
12 <140> CURRENT APPLICATION NUMBER: US 10/500,307
13 <141> CURRENT FILING DATE: 2004-06-28
15 <150> PRIOR APPLICATION NUMBER: PCT/EP02/14749
16 <151> PRIOR FILING DATE: 2002-12-23
18 <150> PRIOR APPLICATION NUMBER: EP 01310937.6
19 <151> PRIOR FILING DATE: 2001-12-28
21 <160> NUMBER OF SEQ ID NOS: 33
23 <170> SOFTWARE: PatentIn version 3.1
25 <210> SEQ ID NO: 1
26 <211> LENGTH: 1338
27 <212> TYPE: DNA
28 <213> ORGANISM: L. acidophilus
30 <400> SEQUENCE: 1
31 atgaagaaaa atttaagaat cgtagcgct gctgctgctg ctttacttgc tgttgctcca      60
33 gttgctgctt ctgctgtatc tactgttagc gctgctacta ctattaacgc aagttcatca      120
35 gcaatcaata ccaacactaa tgctaagtac gatgttgatg taactcctag tgtttctgca      180
37 gttgctgcaa atactgctaa caacactcca gctattgccg gtaaccttac tgggtactatt      240
39 tcagcaagtt acaatggtaa gacttatact gctaaactaa aggagatac tgaaaatgcc      300
41 actattactg ctgctggtag cactactgcc gttaaacctg ctgaattagc tgcagggtgtg      360
43 gcttacactg taactgttaa cgatgtttca tttaaacttcg gttcagaaaa tgcaggtaag      420
45 actgttaccg ttggttcagc taactcaaat gtaaaattca ccggtacaaa cagtgataat      480
47 caaactgaaa ctaatgtttc tactttgaaa gttaaagttag accaaaacgg tgttgcttca      540
49 cttactaatg tttcaattgc aaacgtatac gcaattaaca ctactgataa cagtaacgta      600
51 aacttctacg acgtaactag tgggtgctact gtaactaacg gtgccgtttc agttaatgct      660
53 gataaccaag gtcaagttaa tgttgcaaac gtagttgcag caattaattc aaaatacttt      720
55 gcagcacaat acgcagataa gaagttaaact actcgtactg ctaatactga agatgctatt      780
57 aaggcagcct taaaggacca aaagattgat gtaaaactcag taggttactt caaagcacct      840
59 catactttca ctgttaacgt taaagcaact tcaaatacta atggtaagtc agctactttg      900
61 ccagtagttg ttactgttcc taatgttgct gagccaactg tagccagcgt aagcaagaga      960
63 attatgcaca acgcatacta ctacgacaag gacgctaagc gtgttggtac tgacagcgtt      1020
65 aagcgttaca actcagtaag cgtattgcca aacactacta ctatcaacgg taagacttac      1080
67 taccaagtag ttgaaaacgg taaggctgtt gacaagtaca tcaacgctgc aaacatcgat      1140
69 ggtactaagc gtactttgaa gcacaacgct tacgtttacg catcatcaaa gaagcgtgct      1200
71 aacaaggttg tattgaagaa ggggtgaagtt gtaactactt acggtgcttc atacacattc      1260
73 aagaacggcc aaaagtacta caagatcggt gacaacactg acaagactta cgttaagggt      1320
75 gcaaaacttta gataataa
77                                     1338
78 <210> SEQ ID NO: 2

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79 <211> LENGTH: 413
80 <212> TYPE: PRT
81 <213> ORGANISM: L. acidophilus
83 <400> SEQUENCE: 2
85 Ala Thr Thr Ile Asn Ala Ser Ser Ser Ala Ile Asn Thr Asn Thr Asn
86 1 5 10 15
89 Ala Lys Tyr Asp Val Asp Val Thr Pro Ser Val Ser Ala Val Ala Ala
90 20 25 30
93 Asn Thr Ala Asn Asn Thr Pro Ala Ile Ala Gly Asn Leu Thr Gly Thr
94 35 40 45
97 Ile Ser Ala Ser Tyr Asn Gly Lys Thr Tyr Thr Ala Asn Leu Lys Ala
98 50 55 60
101 Asp Thr Glu Asn Ala Thr Ile Thr Ala Ala Gly Ser Thr Thr Ala Val
102 65 70 75 80
105 Lys Pro Ala Glu Leu Ala Ala Gly Val Ala Tyr Thr Val Thr Val Asn
106 85 90 95
109 Asp Val Ser Phe Asn Phe Gly Ser Glu Asn Ala Gly Lys Thr Val Thr
110 100 105 110
113 Leu Gly Ser Ala Asn Ser Asn Val Lys Phe Thr Gly Thr Asn Ser Asp
114 115 120 125
117 Asn Gln Thr Glu Thr Asn Val Ser Thr Leu Lys Val Lys Leu Asp Gln
118 130 135 140
121 Asn Gly Val Ala Ser Leu Thr Asn Val Ser Ile Ala Asn Val Tyr Ala
122 145 150 155 160
125 Ile Asn Thr Thr Asp Asn Ser Asn Val Asn Phe Tyr Asp Val Thr Ser
126 165 170 175
129 Gly Ala Thr Val Thr Asn Gly Ala Val Ser Val Asn Ala Asp Asn Gln
130 180 185 190
133 Gly Gln Val Asn Val Ala Asn Val Val Ala Ala Ile Asn Ser Lys Tyr
134 195 200 205
137 Phe Ala Ala Gln Tyr Ala Asp Lys Lys Leu Asn Thr Arg Thr Ala Asn
138 210 215 220
141 Thr Glu Asp Ala Ile Lys Ala Ala Leu Lys Asp Gln Lys Ile Asp Val
142 225 230 235 240
145 Asn Ser Val Gly Tyr Phe Lys Ala Pro His Thr Phe Thr Val Asn Val
146 245 250 255
149 Lys Ala Thr Ser Asn Thr Asn Gly Lys Ser Ala Thr Leu Pro Val Val
150 260 265 270
153 Val Thr Val Pro Asn Val Ala Glu Pro Thr Val Ala Ser Val Ser Lys
154 275 280 285
157 Arg Ile Met His Asn Ala Tyr Tyr Tyr Asp Lys Asp Ala Lys Arg Val
158 290 295 300
161 Gly Thr Asp Ser Val Lys Arg Tyr Asn Ser Val Ser Val Leu Pro Asn
162 305 310 315 320
165 Thr Thr Thr Ile Asn Gly Lys Thr Tyr Tyr Gln Val Val Glu Asn Gly
166 325 330 335
169 Lys Ala Val Asp Lys Tyr Ile Asn Ala Ala Asn Ile Asp Gly Thr Lys
170 340 345 350
173 Arg Thr Leu Lys His Asn Ala Tyr Val Tyr Ala Ser Ser Lys Lys Arg

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174          355          360          365
177 Ala Asn Lys Val Val Leu Lys Lys Gly Glu Val Val Thr Thr Tyr Gly
178          370          375          380
181 Ala Ser Tyr Thr Phe Lys Asn Gly Gln Lys Tyr Tyr Lys Ile Gly Asp
182 385          390          395          400
185 Asn Thr Asp Lys Thr Tyr Val Lys Val Ala Asn Phe Arg
186          405          410
189 <210> SEQ ID NO: 3
190 <211> LENGTH: 18
191 <212> TYPE: PRT
192 <213> ORGANISM: ARTIFICIAL SEQUENCE
194 <220> FEATURE:
195 <223> OTHER INFORMATION: INSERTION LINKER
197 <400> SEQUENCE: 3
199 Arg Gly Ser His His His His His Gly Ser Gly Thr Ala Thr Thr
200 1          5          10          15
203 Ile Asn
207 <210> SEQ ID NO: 4
208 <211> LENGTH: 18
209 <212> TYPE: PRT
210 <213> ORGANISM: ARTIFICIAL SEQUENCE
212 <220> FEATURE:
213 <223> OTHER INFORMATION: INSERTION LINKER
215 <400> SEQUENCE: 4
217 Ala Ile Ala Gly Asn Ala Met Ala Ala Ala Arg Gly Asn Leu Thr Gly
218 1          5          10          15
221 Thr Ile
225 <210> SEQ ID NO: 5
226 <211> LENGTH: 18
227 <212> TYPE: PRT
228 <213> ORGANISM: ARTIFICIAL SEQUENCE
230 <220> FEATURE:
231 <223> OTHER INFORMATION: INSERTION LINKER
233 <400> SEQUENCE: 5
235 Val Lys Phe Thr Gly Ala Met Ala Ala Ala Arg Ala Gly Thr Asn Ser
236 1          5          10          15
239 Asp Asn
243 <210> SEQ ID NO: 6
244 <211> LENGTH: 18
245 <212> TYPE: PRT
246 <213> ORGANISM: ARTIFICIAL SEQUENCE
248 <220> FEATURE:
249 <223> OTHER INFORMATION: INSERTION LINKER
251 <400> SEQUENCE: 6
253 Thr Asn Val Ser Ile Thr Met Ala Ala Ala Arg Gly Ile Ala Asn Val
254 1          5          10          15
257 Tyr Ala
261 <210> SEQ ID NO: 7
262 <211> LENGTH: 18

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263 <212> TYPE: PRT
264 <213> ORGANISM: ARTIFICIAL SEQUENCE
266 <220> FEATURE:
267 <223> OTHER INFORMATION: INSERTION LINKER
269 <400> SEQUENCE: 7
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272 1          5          10          15
275 Val Thr
279 <210> SEQ ID NO: 8
280 <211> LENGTH: 18
281 <212> TYPE: PRT
282 <213> ORGANISM: ARTIFICIAL SEQUENCE
284 <220> FEATURE:
285 <223> OTHER INFORMATION: INSERTION LINKER
287 <400> SEQUENCE: 8
289 Asn Ala Ala Asn Ile Val Ala Met Ala Ala Ala Arg Gly Asp Gly Thr
290 1          5          10          15
293 Lys Arg
297 <210> SEQ ID NO: 9
298 <211> LENGTH: 18
299 <212> TYPE: PRT
300 <213> ORGANISM: ARTIFICIAL SEQUENCE
302 <220> FEATURE:
303 <223> OTHER INFORMATION: INSERTION LINKER
305 <400> SEQUENCE: 9
307 Pro Ser Val Ser Ala Ser Met Ala Ala Ala Arg Gly Ala Val Ala Ala
308 1          5          10          15
311 Asn Thr
315 <210> SEQ ID NO: 10
316 <211> LENGTH: 17
317 <212> TYPE: PRT
318 <213> ORGANISM: ARTIFICIAL SEQUENCE
320 <220> FEATURE:
321 <223> OTHER INFORMATION: INSERTION LINKER
323 <400> SEQUENCE: 10
325 Leu Lys Ala Asp Thr Met Ala Ala Ala Arg Asn Thr Glu Asn Ala Thr
326 1          5          10          15
329 Ile
333 <210> SEQ ID NO: 11
334 <211> LENGTH: 18
335 <212> TYPE: PRT
336 <213> ORGANISM: ARTIFICIAL SEQUENCE
338 <220> FEATURE:
339 <223> OTHER INFORMATION: INSERTION LINKER
341 <400> SEQUENCE: 11
343 Ala Glu Leu Ala Ala Ser Met Ala Ala Ala Arg Gly Ala Gly Val Ala
344 1          5          10          15
347 Tyr Thr
351 <210> SEQ ID NO: 12

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352 <211> LENGTH: 18
353 <212> TYPE: PRT
354 <213> ORGANISM: ARTIFICIAL SEQUENCE
356 <220> FEATURE:
357 <223> OTHER INFORMATION: INSERTION LINKER
359 <400> SEQUENCE: 12
361 Lys Thr Val Thr Leu Ala Met Ala Ala Ala Arg Gly Leu Gly Ser Ala
362 1          5          10          15
365 Asn Ser
369 <210> SEQ ID NO: 13
370 <211> LENGTH: 18
371 <212> TYPE: PRT
372 <213> ORGANISM: ARTIFICIAL SEQUENCE
374 <220> FEATURE:
375 <223> OTHER INFORMATION: INSERTION LINKER
377 <400> SEQUENCE: 13
379 Asn Ala Asp Asn Gln Ala Met Ala Ala Ala Arg Gly Gln Val Asn Val
380 1          5          10          15
383 Ala Asn
387 <210> SEQ ID NO: 14
388 <211> LENGTH: 23
389 <212> TYPE: PRT
390 <213> ORGANISM: ARTIFICIAL SEQUENCE
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393 <223> OTHER INFORMATION: INSERTION LINKER
395 <400> SEQUENCE: 14
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398 1          5          10          15
401 Leu Glu Ser Ser Ser Ala Ile
402          20
405 <210> SEQ ID NO: 15
406 <211> LENGTH: 19
407 <212> TYPE: PRT
408 <213> ORGANISM: ARTIFICIAL SEQUENCE
410 <220> FEATURE:
411 <223> OTHER INFORMATION: INSERTION LINKER
413 <400> SEQUENCE: 15
415 Ala Met Val Asn Glu Gln Lys Leu Ile Ser Glu Glu Asp Leu Asn Ala
416 1          5          10          15
419 Arg Gly Asn
423 <210> SEQ ID NO: 16
424 <211> LENGTH: 19
425 <212> TYPE: PRT
426 <213> ORGANISM: ARTIFICIAL SEQUENCE
428 <220> FEATURE:
429 <223> OTHER INFORMATION: INSERTION LINKER
431 <400> SEQUENCE: 16
433 Ala Met Val Asn Glu Gln Lys Leu Ile Ser Glu Glu Asp Leu Asn Ala
434 1          5          10          15

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VERIFICATION SUMMARY

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